

REMARKS

By this amendment, claims 1-3, 5-20 and 82-83 have been canceled, claims 21, 23, 26, 28, 31, 35-38, 42, 86 and 89 have been amended and claims 90-98 have been added. Thus, claims 21, 23-26, 28-33, 35-40, 42-44 and 84-98 are pending in this application.

Applicants appreciate the Examiner's indication that the subject matter recited in previously pending claim 14 is allowable, but respectfully submits that the subject matter recited in all of pending claims 21, 23-26, 28-33, 35-40, 42-44 and 84-89 is allowable over the prior art, for the reasons explained below.

Claims 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 42, 43, 44 and 82-89 have been rejected under 35 U.S.C. 102(e) as being anticipated by Moore et al. (U.S. Patent No. 6,348,365 B2).

Claims 1-3, 5-20, 82-83 and 87-88 have been canceled for reasons not relating to the patentability of those claims. The rejection is therefore moot with respect to these claims.

In each of items 7-30 in the rejection, the Office Action does not always indicate the particular element in Moore which the Examiner interprets as corresponding to the features recited in Applicant's claims, nor does it point out any specific passages in Moore relied upon for supporting the rejection. Nevertheless, Applicants will attempt to address all rejections and why such rejections are improper.

According to the Examiner, the “first line” recited in independent claims 21, 26, 31 and 38 (and previously pending independent claims 1, 8 and 16) reads on the element 12 shown in Figs. 1-6 in Moore, while the “layer of chalcogenide material” recited in these claims reads on the glass element 31 shown in Figs. 3-4 in Moore, and the “second line” recited in Applicant’s claims reads on the element 41 shown in Figs. 4-6 in Moore.

Item 4 in the Office Action also identifies element 160 (in Moore?) as corresponding to the “layer of a second conductive material” recited in each of the aforementioned independent claims. Applicants respectfully note, however, that there is no element 160 in Moore, either in the drawings or in the specification. Thus, Moore does not teach or suggest a “second conductive material” over a line of a first conductive material as recited in Applicant’s claims.

Similarly, independent claims 84, 85, 86 and 89 each recites “a memory access line” and “a layer of [] conductive material disposed . . . on the memory access line,” wherein the material forming the memory access line and the layer of conductive material are different materials. For the same reasons discussed above, these claims also do not read on Moore.

Additionally, independent claims 21, 26, 31, 38, 84, 85, 86 and 89 each recite a “first layer of dielectric material having a first window formed therein,” and either a “first line” or a “first memory access line” disposed in that window. Even assuming *arguendo* that element 12 in Moore corresponds to the “first line” and/or the “first memory access line,” as purported in the Office Action, Moore fails to teach or suggest a window formed in a dielectric layer in which the element 12 is disposed. As such, Moore does not meet all of the features of the claimed invention.

Applicants note that Moore discloses a dielectric layer 13 with a window 22 formed therein, but the “first line” element 12 is not disposed in that window. Furthermore, these same independent claims 21, 26, 31, 38, 84, 85, 86 and 89 also recite a “second layer of dielectric material having a second window therein.” If Moore is interpreted so that the first dielectric layer and first window are its elements 13 and 22, respectively, then Moore fails to teach or suggest a second dielectric layer formed over the first dielectric layer and having a second window formed therein.

Further in this regard, glass element 31 in Moore is a variable resistance chalcogenide layer and is formed directly on or over Moore’s “first line” element 12, with no intervening layers. As such, Moore also fails to teach or suggest the “layer of a second conductive material” formed of a different material than that of the first conductive material, and which is formed over the first line and under the “layer of chalcogenide material” and/or “layer of a variable resistance material” as recited in each of the independent claims mentioned above.

In addition to the first dielectric layer having a window formed therein and the second dielectric layer formed over the first dielectric layer, independent claims 26 and 85 in the present application additionally recite a layer of conductive material disposed over the second layer of dielectric material, and that a second window is formed in the second dielectric layer and the layer of conductive material. As discussed above, assuming that Moore’s dielectric layer 13 and window 22 correspond with the first dielectric layer and first window recited in Applicants’ claims, there is absolutely no teaching or suggestion in Moore of an additional dielectric layer formed over the first dielectric layer and a layer of conductive material formed over the second dielectric layer, with a second window formed in the second dielectric layer and conductive layer.

It is basic tenet of patent law that in order to anticipate a claim, a cited reference must teach each and every element as claimed in the application. Absent such disclosure of every element recited in Applicants' claims and the same relationship between the elements recited in Applicants' claims, the claimed invention cannot be anticipated by the cited reference. Applicants have demonstrated that this is the case in the present application – that Moore does not teach all the elements recited in independent claims 21, 26, 31, 38, 84, 85 and 86, much less the same relationship between such elements as recited in the claims.

Claims 23-25, 28-30, 32-33 and 35-37, 39-40 and 42-44 depend from independent claims 21, 26, 31 and 38, respectively. As such, these claims incorporate all of the features recited in their respective independent claims in combination with subject matter recited in each respective claim. Hence, each of these claims are patentably distinguishable over Moore for at least the same reasons attributable to their respective independent claims.

New independent claims 90, 94, and 98 each recite the same features found in independent claim 26, as discussed above, and therefore are allowable over the prior art for at least the same reasons that claim 26 is allowable. New dependent claims 91-93 and 95-97 depend from independent claims 90 and 94, respectively, which renders these claims allowable also.

In light of the foregoing, withdrawal of the rejection is therefore respectfully requested.


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In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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